

Key

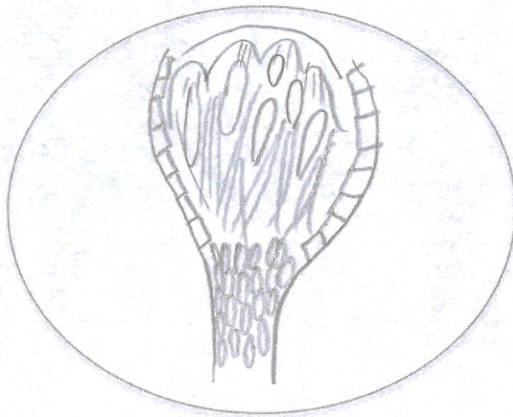
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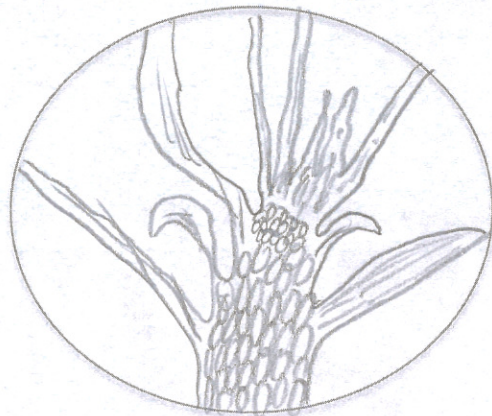
Lab - Mosses & Ferns

The **mosses** are of special interest to the biologist because the mosses were probably the first land plants, although they never became fully adapted to a terrestrial environment. In the life cycle of the moss there is an alteration of generations. The protonema of the moss resembles algae, and the more familiar moss plants we see growing in damp areas resemble the seed plants. The moss will have a gametophyte and a sporophyte stage in its life cycle. Some mosses may appear to have stems and roots, but they have neither because they lack vascular tissue.

Moss Antheridium (Male)



Moss Archegonium (Female)

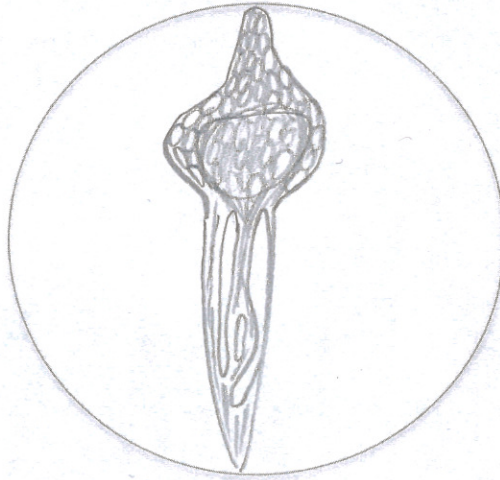


The protonema stage of the moss is small and difficult to distinguish between in nature. However, the moss spores have been cultured and put onto slides for you. Moss spores will germinate quickly and produce green masses of protonema.

Moss Protonema

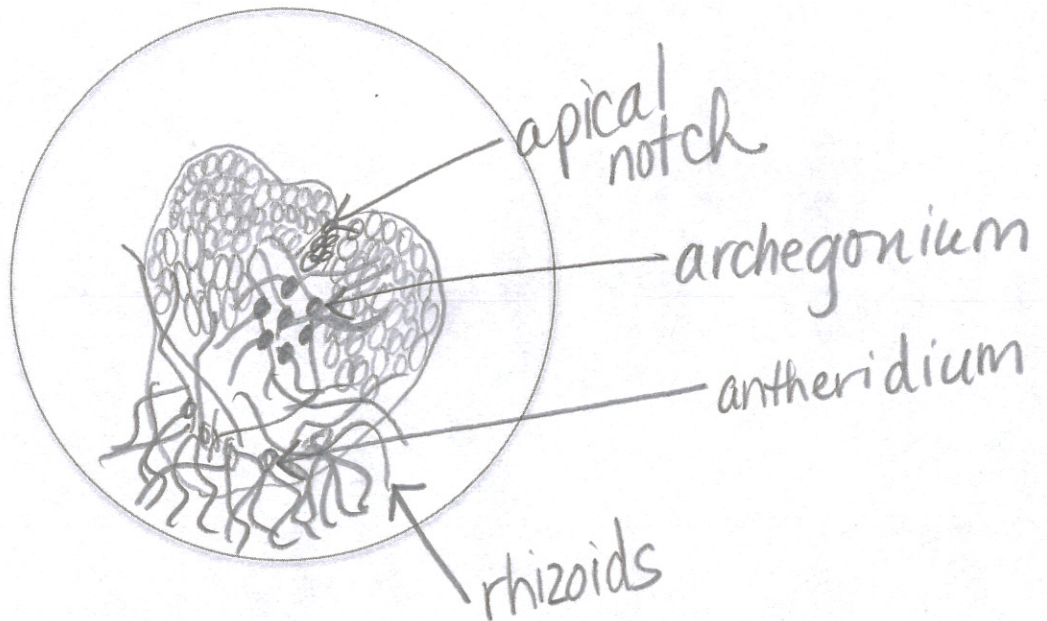


Moss Capsule



The **ferns** are considered to be simple vascular plants because their vascular tissue is poorly developed, and they are considered to be primitive plants because, like the mosses, the ferns require water for fertilization.

Fern Prothallus



In the fern prothallus, the notch is called the **apical notch**, and the dark spots around it are called **archegonium**. At the other end of the prothallus are root-like structures called **rhizoids**, and around the rhizoids are **antheridium**. Label: apical notch, archegonium, rhizoids, and antheridium on drawn picture of fern prothallus.

Fern Sporophyte

